The works of brett nortje volume 11 [14 – 08 – 2016]

Humor.

This is something that is evident in our lives and society, but few can explain it. they say it comes down to an 'x factor' often, and others have no real assertiveness to what it is. so, what is it?

Mockery is a sure way to get laughs, so is cynicism. these words or acts play a role in supposing something is weak or a foolish outcome, defeat in other words. so, is defeat funny? i mean, seeing someone else defeated is funny, as, it makes you feel better about yourself. this is because we have all been defeated before, and are glad it is not happening to us, so, it might also be a bit of thankfulness, yes?

Then there are rhymes and other things that are just plain silly. if you were to make fun of someone or something, you could liken them to a story where there are social norms being broken, or, even a rebellion against authority. these are also funny, for the same reasons as i previously pointed out, of course.

So, defeat and norms being tested are funny, yes?

This is because the human psyche will get rewarded with chemicals to relieve the person of certain worries as it is not happening to them. if the event was to have an effect on them, then other chemicals would be released. the fact is it not about them, relaxes the paranoid incline of our minds, as our consciousness comes from a heightened sense of fear due to our not as effective nervous system and senses. this means we are more aware as we are less bombarded with information like a hawk seeing further away. if the mind empty, it becomes worried, yes? this is because we fear what we do not know, often, and, when we know something bad has happened to someone else, it relieves us in a herd mentality as it is not us 'being caught by the lions.'

This sense of 'immediate survival' will mean our bodies want us to realize that nothing bad has happened to us, or, it is relaxing us so as to relieve the pain of losing a loved one or so. if it is a survival mechanism, as everything is, then we would see the herd laughing at someone else? nonsense. so, it must be a reflex to alleviate the burden of loss in the herd, that the herd has survived the 'conception of this mockery' of the herd, that the person is witnessing something stressful, as the bodies reaction is to jerk back and forth, as if expelling a germ through a sneeze.

Politics.

I have been reading about politics for a few decades now, and actively getting involved in debates for about a decade. what i have learned is everyone has their own approach to politics, and they vary hugely.

So, what is politics? it is about resources, it is about talking instead of arguing, it is about peace and keeping the peace, it is about rights, it is about other things too, but those more or less would sum it up from my side.

It was on this forum about two years ago that i found my angle for politics - resources distribution. if you have resources, they need to be shared out with the rest of the country or region you preside over, or, there will be contempt. this could lead to unhappy citizens - another angle is to keep the majority happy, of course. it is also about getting votes - this it the ultimate goal of politics, of course.

So, my resources angle makes everything a resource. this could be human resources, emotional resources, raw materials, capital resources and liquid finance resources. in short, this is the one i choose to do things because it is so base, and, it works on needs satisfying in general, of course.

Thinking of being a political leader is always a dream. everyone wants to control the way the country works, but, what they do not realize is that it is a hard job stress wise. when someone says something from the heart, a politician cannot respond from their heart at times, as they are sworn to being politically correct, yes? imagine some kids shouting that you are fat or something while you are trying to deal with issues? not nice.

So, what can politicians do to combat the heckler factor? i would say they could focus their energy onto the directing attention towards the personality that is heckling them, and deal with it directly. it is fruitless to shout at your own friends if you are being heckled, and, it would be counter productive to do so.

I find this is why people go after them in the news. they just want to be heard, and the best way to do that is to address the leaders that speak, yes? this would mean they get heard by everyone, for whatever reasons they find satisfying.

Of course, all voices cannot be heard, and then there are memorandums. these are like a lot of people quietly letting the state know that they are upset, and what they would like to see done. this is good for everyone, but, often it is not enough. that is why people take action physically with the state and then cause riots and protests, among other things, like sit ins in some places.

Politics must be about satisfying as many people as possible with the action taken as quickly as possible, in this respect.

Maths.

Maths to me is all about getting values for questions, where you find the right angle or ratio and so forth to get the job done. Maths is practical in ways that include it in many disciplines for people, most notably engineering and science related things. i have covered a lot of engineering related maths, so now it is time to do some science type maths, yes?

Maths in science is about finding balances between things, or good 'exchange rates.' this would be where you measure how much oil and polymers you put into petrol, for example. there needs to be ratios showing how each works with the other and that is science, the maths is finding the non language based solutions to the goals of the 'quest.'

So, if you have a ratio, then you can easily convert that into decimals by finding the lowest common denominator, or, the nearest hundred denominator for the greater value. this would be like having 3:7 - the nearest ten denominator, as i call it, is 30:70 or 300:700. to get it into decimals, you need to say, it is [3x/7y]. this will leave you with two remainder one, yes? then, this would be 2 + 1 / 7 meaning that it could also be [1 + 1 + 1 / 7 =] [100 + 100 + 100 / 700] coming to, if we know our times tables, [700 / 100] * 3 = [21 = 21 + 21 + 21 + x =] [7 / 100 =] [70 + 30] = [7 * 3 =] [21 * 4 = 84 + x =] [%].

This means the answer is [4 * 3 =] 12 sevens for 84. then, you would say the remaining [16 = 7 * 2 + 2]. 12 + 2 sevens plus 2 is the answer in fractions. 14 remainder two, of course. then we would say [2 / 7 =] 3.1 so the answer is 14.31!

I hope you can see that these science cross overs are relevant?

“ Originally Posted by https://en.wikipedia.org/wiki/Algebraic_statistics
Algebraic statistics is the use of algebra to advance statistics. Algebra has been useful for experimental design, parameter estimation, and hypothesis testing.

Traditionally, algebraic statistics has been associated with the design of experiments and multivariate analysis (especially time series). In recent years, the term "algebraic statistics" has been sometimes restricted, sometimes being used to label the use of algebraic geometry and commutative algebra in statistics.”

I think this comes down to [2pi = 1]. this is because there is three choices, being that [i = 0, 1, 2]. this means that if [2p * i = 1], and this is the main equation, then we might be better served to make our own?

Okay,

[Two of something] times by [something else] = [break even point]. to find what the break even point is, we need to double the [p] and then times that by the [i]. this will give what we have broken even to. this stuff about [i = 0, 1, 2] is rather useless, as, it will be setting the math used into binary, basically, which would take a long time to work out.

So, i suppose that to find the algebraic statistics of a given set of values, would be to, first, take [value one] times by [value two] = [percent.] in this, the percent is stipulated at one, so that we can see how much a full volume of this statistics is equal to, raising the value of one to the numeric value using algebra.

This means, you merely need to take [value one] times by [another]. if the other is non existent, then the first remains at zero too, as the answer is [1]. basically, what i suggest to find out what the values are, if they meet the 'target,' you take the target and minus bad values from the good values.

This whole maths thing where everything revolves around the value one, and finding what one equals, is like finding a hundred percent of the other stuff, yes? this would mean that we merely need to reduce one into the parts of the sum, where if [x / 4t / y^7 =] 1, then you simply multiply it backwards, the opposite of bodmas!

This would see the one become part of the sum, instead of having the sum equal one, of course.

Schooling.

I have found that certain subjects of the education system need to go, or, be mixed with others. things like wood work, geography and history need to be changed. these subjects we have inherited from other decades gone past, when people were exploring the world and developing light bulbs and things, and, hold no more merit than studying comic books.

Things that should be included are politics and law, for example. these things will give the student more of a total knowledge of what the world is like now, yes? accounting should be treated as a commerce subject, including things like economics into the subject too.

Art should be mixed with history and other cultural things, like religion. you can get a degree in religion, so why not allow students to prepare for this in school? then they will know if it something they are good at or at least interested in.

Molding.

“Originally Posted by https://en.wikipedia.org/wiki/Molding_(process)
Molding or moulding (see spelling differences) is the process of manufacturing by shaping liquid or pliable raw material using a rigid frame called a mold or matrix.[1] This itself may have been made using a pattern or model of the final object.

A mold or mould is a hollowed-out block that is filled with a liquid or pliable material like plastic, glass, metal, or ceramic raw materials.[2] The liquid hardens or sets inside the mold, adopting its shape. A mold is the counterpart to a cast. The very common bi-valve molding process uses two molds, one for each half of the object. Piece-molding uses a number of different molds, each creating a section of a complicated object. This is generally only used for larger and more valuable objects.

The manufacturer who makes the molds is called the moldmaker. A release agent is typically used to make removal of the hardened/set substance from the mold easier. Typical uses for molded plastics include molded furniture, molded household goods, molded cases, and structural materials.

Types of molding include:

Blow molding
Powder metallurgy plus sintering
Compression molding
Extrusion molding
Injection molding
Laminating
Reaction injection molding
Matrix molding
Rotational molding (or Rotomolding)
Spin casting
Transfer molding
Thermoforming
Vacuum forming, a simplified version of thermoforming”

Now that we understand what molding is, we can try to improve the functions of this type of thing.

“Originally Posted by https://en.wikipedia.org/wiki/Blow_molding
Advantages: Highly suitable for low volumes and short runs. As the preform is not released during the entire process the preform wall thickness can be shaped to allow even wall thickness when blowing rectangular and non-round shapes.

Disadvantages: Restrictions on bottle design. Only a champagne base can be made for carbonated bottles.”

To get more design out of the inside, we could observe the blowing of the inside of the 'bottle' or other materials to make it more easily shaped, by, instead of just blowing the inside, inserting a 'scalpel' to shape the inside of 'the thing.' that said, it will need one side open, so as to allow the 'shaping thing' inside the mold.

Or, we could try to close it once the object has been shaped, by allowing more mold material onto the outside of the materials to 'close the mold.'

Then, we could also try to shape the inside by using an expanding cylinder. this will make the 'shaping device' expand inside the object, and, then retract to the inside of the object again. this can be likened to a little camera that people swallow, except instead of taking pictures, it could disperse materials like a dandy lion or other plant, or 'retract the rods' to the center of the inserted device.

“ Originally Posted by https://en.wikipedia.org/wiki/Powder_metallurgy
Powder metallurgy (PM) is a term covering a wide range of ways in which materials or components are made from metal powders. PM processes can avoid, or greatly reduce, the need to use metal removal processes, thereby drastically reducing yield losses in manufacture and often resulting in lower costs.

Powder metallurgy is also used to make unique materials impossible to melt or form in other ways. A very important product of this type is tungsten carbide (WC). WC is used to cut and form other metals and is made from WC particles bonded with cobalt. It is very widely used in industry for tools of many types and globally ~50,000t/yr is made by PM. Other products include sintered filters, porous oil-impregnated bearings, electrical contacts and diamond tools.”

This obviously goes to liquid form before it gets hard. this means, of course, if you were to want it to 'dry quickly' you might want to 'flash treat' it with nitrogen to bond it quickly. or, we could use wax? these might be able to put the powder together quickly, then flash treat it with some heat, and the materials will be sewn together with the nitrogen in place or the wax melting off.

“Originally Posted by https://en.wikipedia.org/wiki/Compression_molding
Compression molding is a method of molding in which the molding material, generally preheated, is first placed in an open, heated mold cavity. The mold is closed with a top force or plug member, pressure is applied to force the material into contact with all mold areas, while heat and pressure are maintained until the molding material has cured. The process employs thermosetting resins in a partially cured stage, either in the form of granules, putty-like masses, or preforms.

Compression molding is a high-volume, high-pressure method suitable for molding complex, high-strength fiberglass reinforcements. Advanced composite thermoplastics can also be compression molded with unidirectional tapes, woven fabrics, randomly oriented fiber mat or chopped strand. The advantage of compression molding is its ability to mold large, fairly intricate parts. Also, it is one of the lowest cost molding methods compared with other methods such as transfer molding and injection molding; moreover it wastes relatively little material, giving it an advantage when working with expensive compounds.

However, compression molding often provides poor product consistency and difficulty in controlling flashing, and it is not suitable for some types of parts. Fewer knit lines are produced and a smaller amount of fiber-length degradation is noticeable when compared to injection molding. Compression-molding is also suitable for ultra-large basic shape production in sizes beyond the capacity of extrusion techniques. Materials that are typically manufactured through compression molding include: Polyester fiberglass resin systems (SMC/BMC), Torlon, Vespel, Poly(p-phenylene sulfide) (PPS), and many grades of PEEK.[1]

Compression molding was first developed to manufacture composite parts for metal replacement applications, compression molding is typically used to make larger flat or moderately curved parts. This method of molding is greatly used in manufacturing automotive parts such as hoods, fenders, scoops, spoilers, as well as smaller more intricate parts. The material to be molded is positioned in the mold cavity and the heated platens are closed by a hydraulic ram. Bulk molding compound (BMC) or sheet molding compound (SMC), are conformed to the mold form by the applied pressure and heated until the curing reaction occurs. SMC feed material usually is cut to conform to the surface area of the mold. The mold is then cooled and the part removed.

Materials may be loaded into the mold either in the form of pellets or sheet, or the mold may be loaded from a plasticating extruder. Materials are heated above their melting points, formed and cooled. The more evenly the feed material is distributed over the mold surface, the less flow orientation occurs during the compression stage.[citation needed]

Thermoplastic matrices are commonplace in mass production industries. One significant example are automotive applications where the leading technologies are long fibre reinforced thermoplastics (LFT) and glass fiber mat reinforced thermoplastics (GMT).

In compression molding there are six important considerations that an engineer should bear in mind[citation needed]:
Determining the proper amount of material.
Determining the minimum amount of energy required to heat the material.
Determining the minimum time required to heat the material.
Determining the appropriate heating technique.
Predicting the required force, to ensure that shot attains the proper shape.
Designing the mold for rapid cooling after the material has been compressed into the mold.”

So, the main problem is; "Fewer knit lines are produced and a smaller amount of fiber-length degradation is noticeable when compared to injection molding." this means we need to make it more interwoven. this would mean that we need to simply turn it, like a steak? this would see the whole product have a once or twice over as if mixing batter, yes?

To do this, we need to only rotate the setting materials. this can be done by flipping the cast side ways or upside down and over. this will see the materials mix slightly in either direction, taking [a] materials over to [b] materials territory, and [b] materials over to [c] materials territory. in short, they will overlap like runners at the olympics holding hands.

“Originally Posted by https://en.wikipedia.org/wiki/Extrusion
Extrusion is a process used to create objects of a fixed cross-sectional profile. A material is pushed through a die of the desired cross-section. The two main advantages of this process over other manufacturing processes are its ability to create very complex cross-sections, and to work materials that are brittle, because the material only encounters compressive and shear stresses. It also forms parts with an excellent surface finish.[1]

Drawing is a similar process, which uses the tensile strength of the material to pull it through the die. This limits the amount of change which can be performed in one step, so it is limited to simpler shapes, and multiple stages are usually needed. Drawing is the main way to produce wire. Metal bar and tube are also often drawn.

Extrusion may be continuous (theoretically producing indefinitely long material) or semi-continuous (producing many pieces). The extrusion process can be done with the material hot or cold. Commonly extruded materials include metals, polymers, ceramics, concrete, play dough, and foodstuffs. The products of extrusion are generally called "extrudates".

Hollow cavities within extruded material cannot be produced using a simple flat extrusion die, because there would be no way to support the centre barrier of the die. Instead, the die assumes the shape of a block with depth, beginning first with a shape profile that supports the center section. The die shape then internally changes along its length into the final shape, with the suspended center pieces supported from the back of the die. The material flows around the supports and fuses together to create the desired closed shape.

The extrusion process in metals may also increase the strength of the material.”

The main problem here seems to be 'supporting the center barrier of the die.' this would allow for hollowed out things in this type of molding, of course. then, if we could support a 'center barrier,' we could shape the inside of the mold.

This means we need to simply have supports for it enveloped into it. this would see the hollowed out area supported, then the supports themselves become part of the design, allowing for much greater hollowed out potential.

“Originally Posted by https://en.wikipedia.org/wiki/Reaction_injection_molding
The disadvantages are slow cycle times, compared to injection molding, and expensive raw materials.”

So, while i cannot see a problem with injection molding, reaction injection molding seems to be slow? injection molding makes multiple injection points to fill the whole inside of the mold with materials, while reaction injection molding;

“Thermosetting polymers are used, which requires a curing reaction to occur within the mold.”

This can be made easier by using a quicker cooling technique, which i will soon explain to you. if the mold is 'cooled,' say by liquid helium being spilled inside the mold, it will quickly sizzle down to nothing, while the inside of the mold will require mere seconds to cool down as it absorbs the 'ice.'

I remember seeing a red hot nickel ball dropped into a huge piece of ice. the two temperatures quickly reduced each other to room temperature, and, we could do that with this type of problem in reaction injection molding.

“Originally Posted by https://en.wikipedia.org/wiki/Transfer_molding
Transfer molding (BrE moulding) is a manufacturing process where casting material is forced into a mold. Transfer molding is different from compression molding in that the mold is enclosed [Hayward] rather than open to the fill plunger resulting in higher dimensional tolerances and less environmental impact.”

This is where materials are encased inside a mold to get the desired product or parts. if we were to observe that this is mainly a transfer of shapes of the mold, then we would understand properly.

If we were to observe that the shape of the mold needs to be perfect, as there is no suction or pull, but merely a closed thing that rotates for it to 'set,' then there would be a new desire for 'perfect outcomes.' these can come from holding the cast flat, so that it is 'lying down,' and using electricity to make the insides form quickly. electrocuting the materials will provide better bonding, as they are mixing electrons all over the place, leading to better electron bonds.

Creating positive energy – energy conversion.

Creating positive energy is easy from negative energy, as energy is easily transferred from person to person, so is it easily transferred from defamation to enthusiasm. this can be done, if someone shouts at you or stresses you out, observing where the stress came from, and then replying in an 'eager aggressively enthusiastic way.'

This will take the bad vibes and turn them to good ones. this is similar to being a class clown, of course, as if your teacher is boring, then the clown will make light of the situation, relieving stress, and, being seen as the reliever of stress. of course, the desire to be this answer to the problems all the time leads clowns to become more and more annoying, while at the same time offering a break from the monotony of the subject being taught.

So, if you were to have a person shout at you, simply turn that energy into something positive, as, stress is stored energy.

No, if someone drops a lot of work on your desk, think about it positively. it is harder to turn non personal stress or non personal negative energy into something good, so, you need to be aware and deal with the source of your problem - the work. if you approach this in a manner of curiosity; actually being interested in where the goals are for the company, then you will find it easy and refreshing to be a part of the solution, of course.

Textiles.

Textiles make for a great economic outlook, and, clothes to be worn. if there are no textile industries in the country, then you need to import quite a lot. of course, the gains in this industry are rather slim, as, there is not a lot to be made from cloth. sewing things also is included in this industry, all sorts of sewing and knitting and weaving too. you could almost say all arts are included in this industry too.

So, how do we make it better? if the textile market needs to be promoted, then it simply comes down to first sending out samples of your goods to all prospects you can find. it is not a time to be shy - if you get the order, you might get more. why not strive for as many orders as possible?

That aside, it is nearly illegal to use robots to sew for you. this also allows for a human error correcting for the job,w here only a human being can decipher what is reject material or not.

If you were to want to sew faster, sewing machines could be employed to help the typically woman types that these jobs employ. then, there is a new concept of mine - the 'hand sewer.' this would be like a big stapler that you glide over the materials with your hands, one hand to control the sewing machine, one to guide the materials. this will no doubt make the staff much more effective, yes?

Foodstuffs.

This is the industry of producing food and beverages for the populace to purchase. there are many health concerns and major capital requirements for this industry, but, it is still healthy. i know hardly anybody studies agricultural sciences, they instead inherit these skills and the land from their parents usually. this means that they will know first hand how to do what they are taught, but as far as progress in these fields go, they will be at a loss, of course.

Now, i am suggesting that to get all the food healthy, we treat them with antibiotics. then, we treat them with biotic things to taste and be healthy. this idea i got from a friend of mine that developed her own chocolate - she just added the recipe for fudge to the chocolate and then got huge sums of money... bravo dear.

So, you take anything that could be harmful out of the food, and then insert your own concoction of taste and goodness. this will leave you with the ideal foodstuffs, as, they will pass every health code and still taste nice.

Then, there is beverages, why not do the same here?

The thing that gets me is fruit - how do you do this to fruit when the whole thing is biomass? of course, you could simply treat the fruit with white blood cells, cells that are supposed to live in the body, but will live for a short while outside of it, just long enough to fight anything that would fight us from the inside.

Toolmaking and die making.

“Originally Posted by https://en.wikipedia.org/wiki/Tool_and_die_maker
Tool and die makers are a class of machinists in the manufacturing industries who make jigs, fixtures, dies, molds, machine tools, cutting tools, gauges, and other tools used in manufacturing processes.[1] Depending on which area of concentration a particular person works in, he or she may be called by variations on the name, including tool maker (toolmaker), die maker (diemaker), mold maker (moldmaker), tool fitter (toolfitter), etc.

Tool and die makers work primarily in toolroom environments—sometimes literally in one room but more often in an environment with flexible, semipermeable boundaries from production work. They are skilled artisans (craftspeople) who typically learn their trade through a combination of academic coursework and hands-on instruction, with a substantial period of on-the-job training that is functionally an apprenticeship (although usually not nominally today). Art and science (specifically, applied science) are thoroughly intermixed in their work, as they also are in engineering. Manufacturing engineers and tool and die makers often work in close consultation as part of a manufacturing engineering team. There is often turnover between the careers, as one person may end up working in both at different times of their life, depending on the turns of their particular educational and career path. (In fact, there was no codified difference between them during the 19th century; it was only after World War II that engineering became a regulated profession exclusively defined by a university or college engineering degree.) Both careers require some level of talent in both artistic/artisanal/creative areas and math-and-science areas. Job-shop machinists can be any combination of toolmaker and production machinist. Some work only as machine operators, whereas others switch fluidly between toolroom tasks and production tasks.”

So, there is more going on in the tool room than we thought? we should discuss machine tools, dies, jigs, fixtures cutting tools and gauges to see where they can be simplified, of course.

“Originally Posted by https://en.wikipedia.org/wiki/Machine_tool
A machine tool is a machine for shaping or machining metal or other rigid materials, usually by cutting, boring, grinding, shearing, or other forms of deformation. Machine tools employ some sort of tool that does the cutting or shaping. All machine tools have some means of constraining the workpiece and provide a guided movement of the parts of the machine. Thus the relative movement between the workpiece and the cutting tool (which is called the toolpath) is controlled or constrained by the machine to at least some extent, rather than being entirely "offhand" or "freehand".

The precise definition of the term machine tool varies among users, as discussed below. While all machine tools are "machines that help people to make things", not all factory machines are machine tools.

Today machine tools are typically powered other than by human muscle (e.g., electrically, hydraulically, or via line shaft), used to make manufactured parts (components) in various ways that include cutting or certain other kinds of deformation.

With their inherent precision, machine tools enabled the economical production of interchangeable parts.”

Machine tools are used to deform materials. this could include silicon and plastics, of course. these parts would come out of a mold and then be put physically into the thing they are a part of, yes?

Now, if we were to observe that tools will make shapes inside of other things that come out of molds, then maybe the right course is to make a new type of mold where the parts are inserted right into it before the product is shaped? this could be done by allowing the mold to have inserts that are inserted into a drying material, and allowing wires to be mixed into the mold so as to get the final product quickly made.

This would prove to be cheaper, and, the quality can go through before the parts are used in the mold. this would allow for faster finished goods, but if the parts break, then you need to throw the whole thing away, of course.

“ Originally Posted by https://en.wikipedia.org/wiki/Machine_tool
Examples of machine tools are:
Broaching machine
Drill press
Gear shaper
Hobbing machine
Hone
Lathe
Screw machines
Milling machine
Shear (sheet metal)
Shaper
Saws
Planer
Stewart platform mills
Grinding machines
Multitasking machines (MTMs)—CNC machine tools with many axes that combine turning, milling, grinding, and material handling into one highly automated machine tool

When fabricating or shaping parts, several techniques are used to remove unwanted metal. Among these are:
Electrical discharge machining
Grinding (abrasive cutting)
Multiple edge cutting tools
Single edge cutting tools

Other techniques are used to add desired material. Devices that fabricate components by selective addition of material are called rapid prototyping machines.”

Broaching is where there is a rotary or single line file slash saw that makes indents on the metals. it would be far easier to make these with the mold still setting, so that we could use something that is not sticky, or, will not allow for the materials to stick tot he broach.

This could be done by inserting a lot of the materials inside a piece of paper, something that will dissolve yet lay the foundations for the initial shaping, of course. then, the materials could be broached before the need for saws and the like.

Or, the broaches could be made of something that breaks them off, quickly, then would allow for more consistent shape forming this could be done by slicing a mini line of polarized magnetism onto the outside of the materials, and then having a laser attracted to these lines so as to cut out the shape without errors.

Instead of using a gear shaper, the gear, could be made while the metals are still liquid, simply by using another gear that is turning to shape them. this would be like using a cake mold, of course.

The advantage of this is not having to resharpen tools and the speed of it. obviously the gears would come out from the original shape, and, then make a perfect gear if used with air pressure guiding it towards the gear and surrounding necessary shapes and gears.

Honing is using stones to make the surface more smooth in a angular way. this is like sandpapering for wood, of course, and, guess what - the sand paper is basically a piece of paper with sand on it... get it? rocks! of course, the sand is used to make it smooth, and the more it is used, the more it degrades.

So, how do we make this faster... i cannot imagine it being fast, as then the rocks would fall apart. simply we should use wood first to get the metal hot, as this will not break. then, we could use 'sand paper' and then stone. this would allow for a 'gradual indentation' into the metals, with the wood making it smoother, the sand paper making all the chips come off, then a rapid stone treatment to make it smoother, with less chance of breaking your tool.

Any machine used in engineering that requires programming to it, usually also needs a hard drive, yes? well, if they were to mount a circuit board, it would do the same thing. basically, the circuits put the machine on and off, and, at different power levels. when you plug the machine into the wall, you connect it with maximum charge, or, huge amounts of potentially used electricity - that is why you can plug so many things into one plug in your house.

So, if you were to mount simple circuits, it would be simpler to use, easier to repair, cost much less and be faster to make. this would require, of course, a circuit to regulate the incoming current, so that it does not melt the whole machine or things attached to the plug. this is basic electrical engineering, where you need to put a circuit into the machine to take only so much electricity while on, regulating the need for electricity by the pull factor of electrons from the wall socket. this would of course result in the machine melting if not regulated, as the circuit somehow allows only needed electricity in - all energy is heat, okay? the heat comes from negative spin energy particles, like electrons and leptons, but mainly electrons, as there are so many of them in each atom. this means that the 'heat that they produce by spinning' is kept stable by the positive spin things, like protons, balancing them out. if there is a collision, like two stones against each other, the electrons get 'stimulated' and then there is a spark, due to the heat becoming so intense it creates lightning, as, that is what a spark is, a 'junior lightning thing.'

So, to make the perfect circuit board, the error correcting just needs to be be dealt with. this could be done by having a set of circuits that check each other, and, then a reverse circuit that gauges the speed the part is moving at. if it is going too fast, then it supplies less power, too slow and it supplies more power. this is easily done by having transistors be a part of it by having them moving, and, if not moving, supplying the 'machine' or circuit board with that information in the form of being placed off, as they are not stimulated in this 'backward deal.' obviously if it is going too fast, the transistors amount and configuration will stop it going so fast, as there are only a limited amount of transistors to place on, and, having a backward compatible 'plug in wall' circuit breaker could see that pan out nicely.

This milling thing must stop! i am suggesting replacing all tooling with hydraulic presses! these would see the metal laid down, and then using a bolt cutter type of concept, we use pressure applied very fast to shape the metal with a cardboard cut out sort of thing.

This will see the metal pressed into position, or, simply pushed/cut away from the rest of the materials. this would be like a 'paper press,' where the paper is cut when they separate it from the rest of the paper or magazine materials.

“Originally Posted by https://en.wikipedia.org/wiki/Tool_management
Tool management is needed in metalworking so that the information regarding the tools on hand can be uniformly organized and integrated. The information is stored in a database and is registered and applied using tool management. Tool data management consists of specific data fields, graphics and parameters that are essential in production, as opposed to managing general production equipment.

Unlike hand tools, a tool in numerically (digitally) controlled machines is composed of several parts, such as the cutting tool (which may be one piece or comprise a body plus indexable inserts), a collet, and a toolholder with a machine taper. Putting the parts together accurately into an assembly is required to achieve error-free production.

Processing a part with a CNC (computer numerically controlled) machining operation requires several tool assemblies that are documented in a list. Each component, each assembly and each list has an identifier under which the specifications are found. Tool management is divided into documentation (master data) and logistics (transaction data). The documentation includes information needed for a trouble-free and a comprehensible production process. Spare parts, experiences in production and the corresponding data can be managed. Several functions are available to manage, process, print and combine with other applications.

Logistics deals with demand planning, supplies and tool location. This includes, on one hand, the location in the warehouse and the purchasing of individual parts with the corresponding consumption report. It also allows the planning and coordination of the movements of the assemblies within the shop floor.

In the decades of the 2000s and 2010s, tool management has increasingly moved toward a universal, industry-standard, machine-readable format for encoding tooling information, which makes possible better software, greater automation, and better simulation. ISO 13399 (Cutting tool data representation and exchange) "is an international standard designed to give industry a common language to describe cutting tool products in a digital format."[1]”

Tool management is about checking the specs of the tools you are using. basically, it is there to tell you when to sharpen things, or when things have too much resin on them, or, that the tool is just 'not so sharp' anymore.

If you were to apply a coating of graphene to the tools, they would never get 'damaged.' this can be done cheaply, quickly and easily by a solution that will allow the graphene to be set through heating techniques to make the graphene liquid, then dry to form 'the coating.'

degree of freedom" is where the gears or parts are allowed a little space to operate without bringing the machine or gears to a standstill. if the angles were observed, and the recommended degrees are five degrees for the leeway of the gears turning, as if they were set like jig saw pieces, then they would not be able to turn. but, this approach comes with a formula, which we simplify for everyone.

I would say, since that other formula is so 'hard,' that we start with 360 degrees or 1080 degrees on the outside. this means that the 'corresponding gear' that will fit into the materials needs to be at right angles or 90 degrees for 'maximum efficiency.' this would see the relevant gear positioned at forty five degrees, obviously, and then allow for four gears to be mounted in with it.

Now, when it comes to putting little gears into a big one, then you need to observe that it depends on the size of the gear, so that the gear will be given some freedom between the other gears. ideally, this space equals one degree at least, measured via cross section from the original angle or place. this means that you take 1080 degrees and divide these by the 'number of gears,' to find out where each goes. then, you filter it by finding how big each gear may be, through trigonometry, by taking distance or area in degrees equaling the [1080 degrees - 1a] / [area * a]. this would see the angles represent the area by making each angle of the smaller gear translates into area of the smaller one.

“Originally Posted by https://en.wikipedia.org/wiki/Precision_engineering
One of the fundamental principles in precision engineering is that of determinism. System behavior is fully predictable even to nanometer-scale motions.

"The basic idea is that machine tools obey cause and effect relationships that are within our ability to understand and control and that there is nothing random or probabilistic about their behavior. Everything happens for a reason and the list of reasons is small enough to manage." - Jim Bryan

"By this we mean that machine tool errors obey cause-and-effect relationships, and do not vary randomly for no reason. Further, the causes are not esoteric and uncontrollable, but can be explained in terms of familiar engineering principles." - Bob Donaldson

Professors Hiromu Nakazawa and Pat McKeown provide the following list of goals for precision engineering:

Create a highly precise movement.
Reduce the dispersion of the product's or part's function.
Eliminate fitting and promote assembly, especially automatic assembly.
Reduce the initial cost.
Reduce the running cost.
Extend the life span.
Enable the design safety factor to be lowered.
Improve interchangeability of components so that corresponding parts made by other factories or firms can be used in their place.
Improve quality control through higher machine accuracy capabilities and hence reduce scrap, rework, and conventional inspection.
Achieve a greater wear/fatigue life of components.
Make functions independent of one another.
Achieve greater miniaturization and packing densities.
Achieve further advances in technology and the underlying sciences."[2]”

First, i want to talk about making functions independent of each other. this can be done by setting up a conveyor belt and factory style production method, which is what this 'task' is about. simply, there needs to be a huge impetus put on precision, as this is precision engineering, so we would need to make very small tools for them. these can be fitted into grooves on the belt that are also precise, and, then have a feeler, like those 'toy grabbing machines' with the pincer to grab the toys, but in this case it would be the product or materials.

Then, the clamp could close precisely by using magnets on the belt, or, magnetism to get it into the right place. this would see the actual belt or grooves on the belt being charged slightly, as this is very small things we are dealing with, and, if the charge is too much, then the pincer might miss. so, we need to make the pincer an opposing charge to the materials or items, and the belt a unlike charge. this will make the pincer grab onto the belt with great attraction, and the product will resist, as, the pincer will be resistant to the product, yet clutch to the base of the belt and therefore the item.

Then, the pincer and other things will need to be 'rubbery' so as to not damage the materials. this will mean they will slide over the item until they have found the right placement, and then begin doing what they are supposed to do.